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10/707,736	01/08/2004	CHRIS DONG	10653-US-PA	1735

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JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
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EXAMINER	
BODDIE, WILLIAM	
ART UNIT	**PAPER NUMBER**
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/707,736	DONG ET AL.	
	Examiner	Art Unit	
	William L. Boddie	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-7,9-16 and 18-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-16 and 18-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In an amendment dated, January 17th, 2007, the Applicant amended claims 1, 5-7, 9-10,15-16 and 18, cancelled claims 8 and 17, and finally added new claims 30-37. Currently claims 1-7, 9-16, 18-37 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 34 recites the limitation "the light-diffusing surface" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

It appears as thought the Applicant might have intended claim 34 to be dependent upon claim 33 instead of the currently claimed 32. Claim 34 will be examined based on this assumption in the current Office action.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 30, 32 and 36-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Uehara et al. (US 4,772,885).

With respect to claim 30, Uehara discloses, a back light module for providing a full-color surface light source (figs. 11/12), comprising:

a surface light source (151 in fig. 12);

a light-shielding matrix (143 in fig. 12) formed on the surface of the surface light source, wherein the light-shielding matrix has a plurality of lattice points (144a,b,c in fig. 12) that exposes the underlying surface light source;

a fluorescent layer formed inside the lattice points (col. 9, lines 18-22), comprising:

a plurality of first fluorescent-based material (144a in fig. 12) for converting the light from the surface light source into a first color; and

a plurality of second fluorescent-based material (144b in fig. 12) for converting the light from the surface light source into a second color.

a plurality of third fluorescent-based material (144c in fig. 12) for converting the light from the surface light source into a third color light.

With respect to claim 32, Uehara discloses, the back light module of claim 30 (see above), wherein the surface light source includes an ultraviolet light (UV in fig. 12).

With respect to claim 36, Uehara discloses, the back light module of claim 30 (see above), wherein the first, second, and third colors comprise blue, green, and red colors respectively (col. 9, lines 15-25).

With respect to claim 37, Uehara discloses, the backlight module of claim 30 (see above), wherein the lattice points with the first fluorescent-based material, the second fluorescent-based material and the third fluorescent-based material are arranged to form a mosaic pattern (col. 9, lines 12-15).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 6-7, 9-10, 15-16, 18-20, 22, 24-25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara et al. (US 4,772,885) in view of Cupolo, III (US 5,666,174).

With respect to claim 1, Uehara discloses, a back light module (141, 143 and 151 in fig. 12) for providing a full-color surface light source, comprising:

a surface light source (151 in fig. 12) providing a first color of light (UV in fig. 12);

a light-shielding matrix (143 in fig. 12) formed on the surface of the surface light source, wherein the light-shielding matrix has a plurality of lattice points (144a,b,c in fig. 12) that exposes the underlying surface light source; and

a fluorescent layer formed inside the lattice points (col. 9, lines 18-22),

a plurality of first fluorescent-based material (144a in fig. 12) for converting the light from the surface light source into a second color; and

a plurality of second fluorescent-based material (144b in fig. 12) for converting the light from the surface light source into a third color.

Uehara does not expressly disclose, wherein some of the lattice points are uncoated and the first color passing through said uncoated lattice points.

Cupolo discloses, a liquid crystal display device comprising:

a surface light source (31 in fig. 2) providing a first color of light (blue, col. 9, lines 55-58),

a light-shielding matrix (56 in fig. 2), wherein the light-shielding matrix has a plurality of lattice points (col. 6, lines 63-67); and

a fluorescent layer formed inside some of the lattice points (col. 9, lines 58-67; col. 10, lines 5-6; red, green phosphor but simply a diffusive element in the blue points)

a plurality of first fluorescent-based material (green phosphor) for converting the first color light into a second color; and

a plurality of second fluorescent-based material (red phosphor) for converting the first color light into a third color (col. 9, lines 58-60),

wherein the first color light passing through uncoated lattice points (col. 10, lines 5-6; diffusive elements).

Cupolo and Uehara are analogous art because they are both from the same field of endeavor namely, fluorescent-based backlights for LCDs.

At the time of the invention it would have been obvious to one of ordinary skill in the art to replace the UV light of Uehara with the blue light emitting light source of Cupolo, and subsequently pass the blue light through uncoated lattice points, as taught by Cupolo.

The motivation for doing so would have been to produce the maximum amount of light possible from the light source radiation, as well as to prevent damaging the liquid crystal cells from constant exposure to the short wavelength UV rays (Cupolo; col. 10, lines 7-24).

With respect to claim 6, Uehara and Cupolo disclose, the back light module of claim 1 (see above).

Cupolo further discloses, wherein the first, second, and third color lights comprise blue, green, and red color lights, respectively (col. 9, lines 55-63).

With respect to claim 7, Uehara and Cupolo disclose, the back light module of claim 1 (see above).

Cupolo further discloses, wherein the uncoated lattice points are the lattice points without any fluorescent material (col. 10, lines 5-6).

With respect to claim 9, Cupolo and Uehara disclose, the backlight module of claim 7 (see above).

Uehara further discloses, wherein the lattice points with the first fluorescent-based material, the lattice points with the second fluorescent-based material and the lattice points without any fluorescent material are arranged to form a mosaic pattern (col. 9, lines 12-15).

With respect to claim 10, Uehara discloses, a liquid crystal display (figs. 11/12), comprising:

a liquid crystal display panel (35 in fig. 12);

a back light module (141-151 in fig. 12) positioned under the liquid crystal display panel (clear from fig. 12) comprising:

a surface light source (151 in fig. 12);

a light-shielding matrix (143 in fig. 12) formed on the surface of the surface light source, wherein the light-shielding matrix has a plurality of lattice points (144a,b,c in fig. 12) that exposes the underlying surface light source;

a fluorescent layer formed inside the lattice points (col. 9, lines 18-22), comprising:

a plurality of first fluorescent-based material (144a in fig. 12) for converting the light from the surface light source into a second color; and

a plurality of second fluorescent-based material (144b in fig. 12) for converting the light from the surface light source into a third color.

Uehara does not expressly disclose, wherein some of the lattice points are uncoated and the first color passing through said uncoated lattice points.

Cupolo discloses, a liquid crystal display device comprising:

a surface light source (31 in fig. 2) providing a first color of light (blue, col. 9, lines 55-58),

a light-shielding matrix (56 in fig. 2), wherein the light-shielding matrix has a plurality of lattice points (col. 6, lines 63-67); and

a fluorescent layer formed inside some of the lattice points (col. 9, lines 58-67; col. 10, lines 5-6; red, green phosphor but simply a diffusive element in the blue points)

a plurality of first fluorescent-based material (green phosphor) for converting the first color light into a second color; and

a plurality of second fluorescent-based material (red phosphor) for converting the first color light into a third color (col. 9, lines 58-60),

wherein the first color light passing through uncoated lattice points (col. 10, lines 5-6; diffusive elements).

Cupolo and Uehara are analogous art because they are both from the same field of endeavor namely, fluorescent-based backlights for LCDs.

At the time of the invention it would have been obvious to one of ordinary skill in the art to replace the UV light of Uehara with the blue light emitting light source of Cupolo, and subsequently pass the blue light through uncoated lattice points, as taught by Cupolo.

The motivation for doing so would have been to produce the maximum amount of light possible from the light source radiation, as well as to prevent damaging the liquid crystal cells from constant exposure to the short wavelength UV rays (Cupolo; col. 10, lines 7-24).

With respect to claim 15, Uehara and Cupolo disclose, the back light module of claim 10 (see above).

Cupolo further discloses, wherein the first, second, and third color lights comprise blue, green, and red color lights, respectively (col. 9, lines 55-63).

With respect to claim 16, Uehara and Cupolo disclose, the back light module of claim 10 (see above).

Cupolo further discloses, wherein the uncoated lattice points are the lattice points without any fluorescent material (col. 10, lines 5-6).

With respect to claim 18, Cupolo and Uehara disclose, the backlight module of claim 17 (see above).

Uehara further discloses, wherein the first fluorescent-based material, the second fluorescent-based material and the lattice point without any fluorescent material are arranged to form a mosaic pattern (col. 9, lines 12-15).

With respect to claim 19, Uehara and Cupolo disclose, the liquid crystal display of claim 10 (see above).

Uehara further discloses, wherein the liquid crystal display panel furthermore comprises:

an array substrate (15 in fig. 11);

an opposite substrate formed over the array substrate (13 in fig. 11); and

a liquid crystal layer (19 in fig. 11) sandwiched between the array substrate and the opposite substrate.

With respect to claim 20, Uehara and Cupolo disclose, the liquid crystal display of claim 19 (see above).

Uehara further discloses, wherein the array substrate comprises a thin film transistor array substrate (col. 7, lines 12-17) with an interior surface having an array of thin film transistors thereon and a plurality of pixel electrodes (21 in fig. 11) that correspond with the thin film transistors.

With respect to claim 22, Uehara and Cupolo disclose, the liquid crystal display of claim 20 (see above).

Uehara further discloses, wherein the opposite substrate further more comprises a common electrode layer (23 in fig. 11).

With respect to claim 24, Uehara and Cupolo disclose, the liquid crystal display of claim 10 (see above).

Uehara further discloses, wherein the liquid crystal display panel furthermore comprises:

a bottom substrate (15 in fig. 11);

a top substrate (13 in fig.11) positioned over the bottom substrate; and

a liquid crystal layer (19 in fig. 11) sandwiched between the top substrate and bottom substrate (fig. 11).

With respect to claim 25, Uehara and Cupolo disclose, the liquid crystal display of claim 24 (see above).

Uehara further discloses, wherein the bottom substrate has a plurality of first stripe electrodes (21 in fig. 11) and the top substrate has a plurality of second stripe electrodes (23 in fig. 11) such that the first stripe electrodes extend in a direction perpendicular to the second stripe electrodes (fig. 11; col. 7, lines 18-29).

With respect to claim 28, Uehara and Cupolo disclose, the liquid crystal display of claim 10 (see above).

Uehara further discloses, wherein the display furthermore comprises a first polarizing plate (31 in fig. 11) and a second polarizing plate (33 in fig. 11) such that the first polarizing plate and the second polarizing plate are attached to the surface of the liquid crystal display panel (11 in fig. 11).

7. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara et al. (US 4,772,885) in view of Cupolo, III (US 5,666,174) and further in view of Nakabayashi et al. (US 6,379,017).

With respect to claim 2, Uehara and Cupolo disclose, the back light module of claim 1 (see above).

Neither Uehara nor Cupolo expressly disclose, wherein the surface light source comprises a cold cathode fluorescent flat lamp.

Nakabayashi discloses, a back light module wherein a surface light source (2 in fig. 19) comprises a cold cathode fluorescent flat lamp (col. 17, lines 11-17).

Nakabayashi, Cupolo and Uehara are analogous art because they are both from the same field of endeavor namely construction of back light modules.

At the time of the invention it would have been obvious to one of ordinary skill in the art to comprise the lamp source of Uehara and Cupolo with the cold cathode fluorescent flat lamp technology and light guide of Nakabayashi.

The motivation for doing so would have been to achieve a more even luminance across the device (Nakabayashi; col. 1, lines 61-64).

With respect to claim 11, Uehara and Cupolo disclose, the liquid crystal display of claim 10 (see above).

Neither Uehara nor Cupolo expressly disclose, wherein the surface light source comprises a cold cathode fluorescent flat lamp.

Nakabayashi discloses, a back light module wherein a surface light source (2 in fig. 19) comprises a cold cathode fluorescent flat lamp (col. 17, lines 11-17).

At the time of the invention it would have been obvious to one of ordinary skill in the art to comprise the lamp source of Uehara and Cupolo with the cold cathode fluorescent flat lamp technology and light guide of Nakabayashi.

The motivation for doing so would have been to achieve a more even luminance across the device (Nakabayashi; col. 1, lines 61-64).

8. Claims 3-4 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara et al. (US 4,772,885) in view of Cupolo, III (US 5,666,174) and further in view of Ciupke et al. (US 5,485,354).

With respect to claim 3, Uehara and Cupolo disclose, the back light module of claim 1 (see above).

Uehara and Cupolo further disclose, a linear light source (151 in fig. 12; 31 in fig. 3, respectively).

Neither Uehara nor Cupolo expressly disclose a light-guiding plate, or a reflective holder.

Ciupke discloses, a back light module comprising: a light-guiding plate (11 in fig. 2) having a light-receiving surface (left side of plate in fig. 2), a light-emitting surface (14 in fig. 2) and a light-diffusing surface;

a reflective holder (26 in fig. 2) positioned close to the light-receiving surface; and

a linear light source (23 in fig. 2) enclosed by the reflective holder (clear from fig. 2).

Uehara, Cupolo and Ciupke are analogous art because they are both from the same field of endeavor namely the design of back light modules.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the light guide structure of Nakabayashi in the device of Uehara and Cupolo.

The motivation for doing so would have been, to improve the uniformity of the light emitted from the device (Ciupke; col. 2, lines 2-7).

With respect to claim 4, Uehara, Cupolo and Ciupke disclose, the back light module of claim 3 (see above; also note the assumption in the above 112 rejection).

Ciupke further discloses, wherein the light-diffusing surface has a plurality of V-cuts (17, 16 in fig. 2).

With respect to claim 12, Uehara and Cupolo disclose, the liquid crystal display of claim 10 (see above).

Neither Uehara nor Cupolo expressly disclose a light-guiding plate, or a reflective holder.

Ciupke discloses, a back light module comprising: a light-guiding plate (11 in fig. 2) having a light-receiving surface (left side of plate in fig. 2), a light-emitting surface (14 in fig. 2) and a light-diffusing surface;

a reflective holder (26 in fig. 2) positioned close to the light-receiving surface; and

a linear light source (23 in fig. 2) enclosed by the reflective holder (clear from fig. 2).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the light guide structure of Nakabayashi in the device of Uehara and Cupolo.

The motivation for doing so would have been, to improve the uniformity of the light emitted from the device (Ciupke; col. 2, lines 2-7).

With respect to claim 13, Uehara, Cupolo and Ciupke disclose, the back light module of claim 12 (see above).

Ciupke further discloses, wherein the light-diffusing surface has a plurality of V-cuts (17, 16 in fig. 2).

9. Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara et al. (US 4,772,885) in view of Cupolo, III (US 5,666,174) and Ciupke et al. (US 5,485,354) and further in view of Nakabayashi et al. (US 6,379,017).

With respect to claim 5, Uehara, Cupolo and Ciupke disclose, the back light module of claim 3 (see above; also note the assumption in the 112 rejection).

Neither Cupolo, Ciupke nor Uehara expressly disclose the specific use of a cold cathode fluorescent lamp or a light emitting diode array.

Nakabayashi discloses, a back light module wherein a surface light source (2 in fig. 19) comprises a cold cathode fluorescent flat lamp (col. 17, lines 11-17).

Nakabayashi, Ciupke, Cupolo and Uehara are analogous art because they are both from the same field of endeavor namely construction of back light modules.

At the time of the invention it would have been obvious to one of ordinary skill in the art to comprise the lamp source of Uehara, Ciupke and Cupolo with the cold cathode fluorescent flat lamp technology of Nakabayashi.

The motivation for doing so would have been the well-known advantage of cold cathode fluorescent lamps to operate at near ambient temperatures.

With respect to claim 14, Uehara, Cupolo and Ciupke disclose, the back light module of claim 12 (see above).

Neither Cupolo, Ciupke nor Uehara expressly disclose the specific use of a cold cathode fluorescent lamp or a light emitting diode array.

Nakabayashi discloses, a back light module wherein a surface light source (2 in fig. 19) comprises a cold cathode fluorescent flat lamp (col. 17, lines 11-17).

At the time of the invention it would have been obvious to one of ordinary skill in the art to comprise the lamp source of Uehara, Ciupke and Cupolo with the cold cathode fluorescent flat lamp technology of Nakabayashi.

The motivation for doing so would have been the well-known advantage of cold cathode fluorescent lamps to operate at near ambient temperatures.

10. Claims 21, 23 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara et al. (US 4,772,885) in view of Cupolo, III (US 5,666,174) and further in view of Asai et al. (US 6,166,713).

With respect to claim 21, Uehara and Cupolo disclose, the liquid crystal display of claim 20 (see above).

Neither Cupolo nor Uehara expressly disclose, wherein the display furthermore comprises a first alignment film positioned over the interior surface of the thin film transistor array substrate to cover the thin film transistors and the pixel electrodes.

Asai discloses, a LCD display (fig. 2) that comprises a first alignment film (401 in fig. 2) positioned over an interior surface (125 in fig. 2) of a thin film transistor (121 in fig.

2) array (fig. 3) substrate to cover the thin film transistors and pixel electrodes (131 in fig. 2).

Asai, Cupolo and Uehara are analogous art because they are both from the same field of endeavor namely, active matrix liquid crystal display devices and their respective components.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the alignment films disclosed by Asai in the LCD display of Uehara and Cupolo.

The motivation for doing so would have been to achieve the well known in the art advantage of having the LC molecules aligned in the same direction, thereby enabling a higher display quality.

With respect to claim 23 Uehara and Cupolo disclose, the liquid crystal display of claim 22 (see above).

Neither Cupolo nor Uehara expressly disclose, wherein the display furthermore comprises a second alignment film positioned over the interior surface of the opposite substrate to cover the common electrode layer.

Asai discloses, a LCD display (fig. 2) that comprises a second alignment film (411 in fig. 2) positioned over an interior surface of an opposite substrate (200 in fig. 2) to cover a common electrode layer (231 in fig. 2).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the alignment films disclosed by Asai in the LCD display of Uehara and Cupolo.

The motivation for doing so would have been to achieve the well known in the art advantage of having the LC molecules aligned in the same direction, thereby enabling a higher display quality.

With respect to claim 26, Uehara and Cupolo disclose, the liquid crystal display of claim 25 (see above).

Neither Cupolo nor Uehara expressly disclose, wherein the display furthermore comprises a first alignment film positioned over the interior surface of the bottom substrate to cover the first stripe electrodes.

Asai discloses, a LCD display (fig. 2) that comprises a first alignment film (401 in fig. 2) positioned over an interior surface (125 in fig. 2) of a bottom substrate (101 in fig. 2) to cover first stripe electrodes (131 in fig. 2).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the alignment films disclosed by Asai in the LCD display of Uehara and Cupolo.

The motivation for doing so would have been to achieve the well known in the art advantage of having the LC molecules aligned in the same direction, thereby enabling a higher display quality.

With respect to claim 27, Uehara and Cupolo disclose, the liquid crystal display of claim 25 (see above).

Neither Cupolo nor Uehara expressly disclose, wherein the display furthermore comprises a second alignment film positioned over the interior surface of the top substrate to cover the second stripe electrodes.

Asai discloses, a LCD display (fig. 2) that comprises a second alignment film (411 in fig. 2) positioned over an interior surface of a top substrate (200 in fig. 2) to cover second stripe electrodes (231 in fig. 2).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the alignment films disclosed by Asai in the LCD display of Uehara and Cupolo.

The motivation for doing so would have been to achieve the well known in the art advantage of having the LC molecules aligned in the same direction, thereby enabling a higher display quality.

11. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara et al. (US 4,772,885) in view of Cupolo, III (US 5,666,174) and further in view of Lee et al. (US 2003/014060).

With respect to claim 29, Uehara and Cupolo disclose, the liquid crystal display of claim 10 (see above).

Neither Cupolo nor Uehara expressly disclose a prism.

Lee discloses, wherein the display further more comprises a prism positioned between a liquid crystal display panel and a back light module (para. 5).

Lee, Cupolo and Uehara are analogous art because they are both from the same field of endeavor namely construction of back light modules.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include a prism, as in Lee, between the light source and the LCD of Uehara and Cupolo.

The motivation for doing so would have been to increase the brightness of the light (Lee; para. 5).

Claims 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara et al. (US 4,772,885) in view of Nakabayashi et al. (US 6,379,017).

With respect to claim 31, Uehara discloses, the back light module of claim 30 (see above).

Uehara does not expressly disclose, wherein the surface light source comprises a cold cathode fluorescent flat lamp.

Nakabayashi discloses, a back light module wherein a surface light source (2 in fig. 19) comprises a cold cathode fluorescent flat lamp (col. 17, lines 11-17).

Nakabayashi and Uehara are analogous art because they are both from the same field of endeavor namely construction of back light modules.

At the time of the invention it would have been obvious to one of ordinary skill in the art to comprise the lamp source of Uehara with the cold cathode fluorescent flat lamp technology and light guide of Nakabayashi.

The motivation for doing so would have been to achieve a more even luminance across the device (Nakabayashi; col. 1, lines 61-64).

With respect to claim 35, Uehara discloses, the back light module of claim 32 (see above).

Uehara does not expressly disclose, wherein the surface light source comprises a cold cathode fluorescent flat lamp.

Nakabayashi discloses, a back light module wherein a surface light source (2 in fig. 19) comprises a cold cathode fluorescent flat lamp (col. 17, lines 11-17).

Nakabayashi and Uehara are analogous art because they are both from the same field of endeavor namely construction of back light modules.

At the time of the invention it would have been obvious to one of ordinary skill in the art to comprise the lamp source of Uehara with the cold cathode fluorescent flat lamp technology and light guide of Nakabayashi.

The motivation for doing so would have been to achieve a more even luminance across the device (Nakabayashi; col. 1, lines 61-64).

Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara et al. (US 4,772,885) in view of Ciupke et al. (US 5,485,354).

With respect to claim 33, Uehara discloses, the back light module of claim 30 (see above).

Uehara further discloses, a linear light source (151 in fig. 12; 31 in fig. 3, respectively).

Uehara does not expressly disclose a light-guiding plate, or a reflective holder.

Ciupke discloses, a back light module comprising: a light-guiding plate (11 in fig. 2) having a light-receiving surface (left side of plate in fig. 2), a light-emitting surface (14 in fig. 2) and a light-diffusing surface;

a reflective holder (26 in fig. 2) positioned close to the light-receiving surface; and

a linear light source (23 in fig. 2) enclosed by the reflective holder (clear from fig. 2).

Uehara and Ciupke are analogous art because they are both from the same field of endeavor namely the design of back light modules.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the light guide structure of Nakabayashi in the device of Uehara.

The motivation for doing so would have been, to improve the uniformity of the light emitted from the device (Ciupke; col. 2, lines 2-7).

With respect to claim 34, Uehara and Ciupke disclose, the back light module of claim 33 (see above).

Ciupke further discloses, wherein the light-diffusing surface has a plurality of V-cuts (17, 16 in fig. 2).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Wlb
3/27/07

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